

IN THE UNITED STATES PATENT AND TRADEMARK

In re application of

Yorimasa SUWA, et al.

Appln. No. 10/048,964

Confirmation No.: 5994

Filed: February 5, 2002

NEUROPATHY THERAPEUTIC AGENT For:

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97 and 1.98

Group Art Unit: 1614

Examiner: Not Yet Assigned

Commissioner for Patents Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure under 37 C,F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) (substitute for PTO Form 1449) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

One copy of each of the listed documents is submitted herewith.

The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date for an application other than a continued prosecution application (CPA) under §1.53(d); (2) Before the mailing date of the first Office Action on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after filing a INFORMATION DISCLOSURE STATEMENT U.S. Appln. No. 10/048,964

request for continued examination (RCE) under §1.114, and therefore, no Statement under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

Masaaki SUZUKI, et al. "15-Deoxy-16-(m-tolyl)-17, 18, 19, 20-tetranoriso-carcarbacyclin: a simple TIC derivative with potent anti-apototic activity for neuronal cells" and Masaaki SUZUKI, et al., "(15R)-16-m-tolyl-17, 18, 19, 20- tetranorisocarcarbacyclin: A stable ligand with high binding affinity and selectivity for a prostacyclin receptor in the central nervous system" were disclosed in the International Search Report submitted on February 5, 2002. For the Examiner's convenience copies are attached.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for foreign language documents, Applicant submits the following explanations:

Jpn Pharmacol Ther, "The Neurite Outgrowth Action of Prostaglandins in Neuronal Cells", is disclosed in the specification at page 5, line 35.

Bulletin of the Japanese Neurochemical Society, "Cell differentiation action of prostaglandin D<sub>2</sub> to neuromatous cells", is disclosed in the specification at page 5, line 34.

An English translation of the relevant part of Masaaki SUZUKI, et al., "Design of Prostaglandins with High Binding Affinity and Selectivity for a IP2 Receptor in the Central Nervous System and their Biological Activity" is attached.

INFORMATION DISCLOSURE STATEMENT U.S. Appln. No. 10/048,964

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

Respectfully submitted,

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Date: May 24, 2002

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	ĺ	Toshiya MINAGAWA, et al., "Blood-brain-barrier Transport of Linid Microspheres Containing Clipprost of							
<del></del>	<del> </del>	Prostaglandin I <sub>2</sub> Analogue", J. Pharm. Pharmacol, 1996, 48: pp. 1016-1022.  Yumiko WATANABE, et al., "A Novel Subtype of Prostacyclin Receptor in the Central Nervous System",							
	1	Journal of Ne	urochemistry 199	A Novel Subty	pe of Prostacyclin F. 6, pp.2583-2592.	Receptor in the Co	entral Nervous System",		
		K. MATSUM	URA, et al "Pro	stacyclin Recer	otor in the Brain and	Central Termina	als of the Primary Sensory	<del> </del>	
	j i	Neurons: An	Autoradiographic	Study Using a	Stable Prostacyclin	Analogue [3H]ilo	oprost". 1995	1	
	<u> </u>	Neuroscience	Vol. 65, No. 2, pr	o. 493-503.					
		Akinori AKA	IKE, et al., "Prost	aglandin E <sub>2</sub> protects cultured cortical neurons against N-methyl-D-asparate					
	Chantal CAZEVIEILLE, et al., Prostacyclin (PGI <sub>2</sub> ) protects rat cortical neurons in culture against hypoxia/reoxygenation and glutamate-induced injury", 1993, Neuroscience Letters, 160, pp. 106-108.  Seiji MATSUDA, et al., "Protective effect of of a prostaglandin I <sub>2</sub> analog, TEI-7165, on ischemic neuronal damage in gerbils", 1997, Brain Research 769, pp. 321-328.  Robert F. NEWTON, et al., "Strategies Employed in the Synthesis of Prostacyclins and Thrombovanes"								
							and Thromboxanes"		
		Reviews, pp. 449-478.							
		Jpn Pharmacol Ther, "The Neurite Outgrowth Action of Prostaglandins in Neuronal Cells", 1993, Vol. 21,						no	
		140. 1, pp. 37-39.							
	Bulletin of the Japanese Neurochemical Society, "Cell differentiation action of prostaglandin D <sub>2</sub> to neuromatous cells", 1985, Vol. 24, pp. 376-379.				No				
Peter J. LEWIS, et al., "Clinical Pharmacology of Prostacyc						v.			
		A. NITTA, et al., β-Amyloid protein-induced Alzheimer's disease animal model" 1994. Neurospingo							
		Letters 170, pp. 63-66.							
	ĺ	derivative with	Asaaki SUZUKI, et al. "15-Deoxy-16-(m-tolyl)-17, 18, 19, 20-tetranorisocarcarbacyclin: a simple TIC						
	derivative with potent anti-apototic activity for neuronal cells", Chemical Communications. (Cambridge), 1999, 4, pp. 307-308.						cations. (Cambridge),		
		Masaaki SUZUKI, et al., "(15R)-16-m-tolyl-17, 18, 19, 20- tetranorisocarcarbacyclin: A stable ligand with							
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		Chem. Int. Ed.	Engl. 1996, 35, N	o. 3. pp. 334-3	36		_		
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		Trainiai F100uc	is , 1996 (FUKUOK	a), pp. 145-150	υ. -				
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Applicant's unique citation designation number (optional).

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